

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

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In re Application of: Roland STEFFEN *et al.*

Confirmation No.: 3912

Application No.: 10/563,030

Examiner: Ajibola Akinyemi

Filed: May 18, 2006

Group Art Unit: 2618

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For: HIGH-FREQUENCY MEASURING SYSTEM HAVING SPATIALLY  
SEPARATED HIGH-FREQUENCY MODULES

Commissioner for Patents  
Alexandria, VA 22313-1450

**APPEAL BRIEF**

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed November 11,  
2009.

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**I. REAL PARTY IN INTEREST**

Rohde & Schwarz GMBH & Co. KG is the real party in interest.

**II. RELATED APPEALS AND INTERFERENCES**

Appellant is unaware of any related appeals and interferences.

**III. STATUS OF THE CLAIMS**

Claims 1, 3-12, and 14-19 are pending in this appeal. Claims 2, 13, and 20 have earlier been canceled. No claim is allowed. This appeal is therefore taken from the final rejection of claims 1, 3-12, and 14-19 on August 13, 2009, which was maintained in the Advisory Action dated September 28, 2009.

**IV. STATUS OF AMENDMENTS**

No amendments to the claims were set forth in the Response Under 37 CFR §1.116 filed on September 9, 2009.

**V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

Independent claim 1 is directed to a high-frequency measuring system (see, e.g., reference number 1, 1'; FIGS. 1-3, page 8, lines 12-13 of original English translation of PCT/EP2004/005728) for measuring a device under test (see, e.g., reference number 19; FIG. 1; page 10, lines 4-5), comprising: a measuring-device unit (see, e.g., reference number 2; FIGS. 1-3; page 8, lines 13-14); and a first high-frequency module (see, e.g., reference numbers 3, 24, 24'; FIGS. 1-3; page 13, line 13) including a transmitter device configured to communicate with the

device under test (see, e.g., reference numbers 28, 28'; FIGS. 2-3; page 13, lines 29-34) and a second high-frequency module (see, e.g., reference numbers 3, 25, 25'; FIGS. 1-3; page 13, line 14) including a receiver device configured to communicate with the device under test (see, e.g., reference numbers 29, 29'; FIGS. 2-3; page 13, line 30, through page 14, line 3), wherein each high-frequency module is placed spatially separated from the measuring-device unit (see, e.g., FIGS. 1-3; page 4, lines 31-34) and each high-frequency module is connected to the measuring-device unit via a digital interface (see, e.g., reference numbers 23, 26, 27, 23', 26', 27'; FIGS. 2-3; page 11, lines 12-14, and page 13, lines 9-27), wherein the measuring-device unit is configured to process input data input into the measuring-device unit to form a bitstream for transmission via the digital interface to the first high-frequency module (see, e.g., page 11, line 27, through page 12, line 15), and the first high-frequency module is configured to subsequently forward the bitstream to the device under test using the transmitter device (see, e.g., page 11, line 27, through page 12, line 15), the processing of the input data including assigning symbols to states in a state diagram of an I-Q (in phase – quadrature phase) level in the measuring-device unit (see, e.g., page 12, lines 15-19), wherein one or more of the first high-frequency module and the second high-frequency module includes a local oscillator (see, e.g., reference numbers 34, 34', 32, 32'; FIGS. 2-3; page 14, lines 1-10), and wherein the one or more high-frequency module including the local oscillator is provided in a housing that is separate from a housing of the measuring-device unit (see, e.g., FIGS. 1-3; page 4, line 31, through page 5, line 34, and page 21, line 17, through page 22, line 13).

Independent claim 12 is directed to a high-frequency measuring system (see, e.g., reference number 1, 1'; FIGS. 1-3, page 8, lines 12-13 of original English translation of PCT/EP2004/005728) for measuring a device under test (see, e.g., reference number 19; FIG. 1;

page 10, lines 4-5), comprising: a measuring-device unit for receiving input data from a user (see, e.g., reference number 2; FIGS. 1-3; page 8, lines 13-14, and page 11, line 27, through page 12, line 4); and a first high-frequency module (see, e.g., reference numbers 3, 24, 24'; FIGS. 1-3; page 13, line 13) including a transmitter device configured to communicate with the device under test (see, e.g., reference numbers 28, 28'; FIGS. 2-3; page 13, lines 29-34) and a second high-frequency module (see, e.g., reference numbers 3, 25, 25'; FIGS. 1-3; page 13, line 14) including a receiver device configured to communicate with the device under test (see, e.g., reference numbers 29, 29'; FIGS. 2-3; page 13, line 30, through page 14, line 3), wherein each high-frequency module is placed spatially separated from the measuring-device unit (see, e.g., FIGS. 1-3; page 4, lines 31-34) and each high-frequency module is connected to the measuring-device unit via a digital interface (see, e.g., reference numbers 23, 26, 27, 23', 26', 27'; FIGS. 2-3; page 11, lines 12-14, and page 13, lines 9-27), wherein the receiver device is configured to receive a message comprising a high-frequency signal originating from the device under test (see, e.g., FIGS. 1-3; page 12, line 21, through page 13, line 2, and page 14, lines 1-25), the second high-frequency module being configured to process the high-frequency signal to form a first bitstream for transmission via the digital interface to the measuring-device unit (see, e.g., FIGS. 1-3; page 14, lines 1-25), the processing, by the second high-frequency module, including converting the high-frequency signal to an intermediate-frequency signal and digitizing the intermediate-frequency signal for transmission via the digital interface to the measuring-device unit for evaluation of the message (see, e.g., FIGS. 1-3; page 14, lines 3-25), wherein the measuring-device unit is configured to process the input data to form a second bitstream for transmission via the digital interface to the first high-frequency module (see, e.g., page 11, line 27, through page 12, line 15), and the first high-frequency module is configured to subsequently forward the

second bitstream to the device under test using the transmitter device (see, e.g., page 11, line 27, through page 12, line 15), wherein one or more of the first high-frequency module and the second high-frequency module includes a local oscillator (see, e.g., reference numbers 34, 34', 32, 32'; FIGS. 2-3; page 14, lines 1-10), and wherein the one or more high-frequency module including the local oscillator is provided in a housing that is separate from a housing of the measuring-device unit (see, e.g., FIGS. 1-3; page 4, line 31, through page 5, line 34, and page 21, line 17, through page 22, line 13).

Independent claim 16 is directed to a method for testing a device under test (see, e.g., reference number 19; FIG. 1; page 10, lines 4-5 of original English translation of PCT/EP2004/005728), comprising: receiving input data from a user using a measuring-device unit (see, e.g., reference number 2; FIGS. 1-3; page 8, lines 13-14, and page 11, line 27, through page 12, line 4); forming, based on the input data, a first bitstream for transmission via a digital interface to a first high-frequency module (see, e.g., page 11, line 27, through page 12, line 15), the first high-frequency module (see, e.g., reference numbers 3, 24, 24'; FIGS. 1-3; page 13, line 13) including a transmitter configured to communicate with the device under test (see, e.g., reference numbers 28, 28'; FIGS. 2-3; page 13, lines 29-34) to subsequently forward the first bitstream to the device under test (see, e.g., page 11, line 27, through page 12, line 15), wherein the first bitstream forming includes assigning symbols to states relating to an I-Q (in phase – quadrature phase) level (see, e.g., page 12, lines 15-19); and receiving a second bitstream representative of high-frequency signal messages originating from the device under test (see, e.g., FIGS. 1-3; page 12, line 21, through page 13, line 2, and page 14, lines 1-25) via a second high-frequency module (see, e.g., reference numbers 3, 25, 25'; FIGS. 1-3; page 13, line 14) including a receiver configured to communicate with the device under test (see, e.g., reference numbers 29,

29'; FIGS. 2-3; page 13, line 30, through page 14, line 3), the second high-frequency module processing the high-frequency signal messages to form the second bitstream (see, e.g., FIGS. 1-3; page 14, lines 1-25), the processing, by the second high-frequency module, including converting the high-frequency signal messages to intermediate-frequency signals and digitizing the intermediate-frequency signals (see, e.g., FIGS. 1-3; page 14, lines 3-25), wherein one or more of the first high-frequency module and the second high-frequency module includes a local oscillator (see, e.g., reference numbers 34, 34', 32, 32'; FIGS. 2-3; page 14, lines 1-10), and wherein the one or more high-frequency module including the local oscillator is provided in a housing that is separate from a housing of the measuring-device unit (see, e.g., FIGS. 1-3; page 4, line 31, through page 5, line 34, and page 21, line 17, through page 22, line 13).

#### **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

A. Claims 1, 5-7, 10-12, and 14-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Weiler et al.* (U.S. Patent No. 5,970,395) in view of *Seike et al.* (U.S. Patent No. 6,243,576) and *Wedge et al.* (U.S. Patent No. 5,170,126).

B. Claims 3, 4, 8, and 9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over *Weiler et al.* in view of *Seike et al.*, *Wedge et al.*, and *Agilent PNA Network Analyzers*.

#### **VII. ARGUMENT**

For the convenience of the Honorable Board of Patent Appeals and Interferences ("Board"), Appellants do not separately argued the patentability of any of dependent claims 3-11, 14, 15, and 17-19. Instead, the patentability of these claims stands or falls with their respective independent claims 1, 12, and 16.

**A. THE REJECTION OF CLAIMS 1, 5-7, 10-12, AND 14-19 UNDER 35 U.S.C. §103 FOR OBVIOUSNESS PREDICATED UPON *WEILER ET AL.* IN VIEW OF *SEIKE ET AL.* AND *WEDGE ET AL.***

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992)(see also, MPEP §2141). In rejecting a claim under 35 U.S.C. § 103, the Examiner is required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The Administrative Procedures Act (APA) mandates the Patent Office to make the necessary findings and provide an administrative record showing the evidence on which the findings are based, accompanied by the reasoning in reaching its conclusions. See *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001); *In re Gartside*, 203 F.3d 1305, 1314, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000).

Also, as noted in MPEP §2142, “[t]o reach a proper determination under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical ‘person of ordinary skill in the art’ when the invention was unknown and just before it was made. .... Knowledge of applicant’s disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the “differences,” conduct the search and evaluate the “subject matter as a whole” of the invention. .... However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.”

The Appellants submit that the Office Action fails to establish a *prima facie* case of obviousness for the claims as they are set forth herein, since there is no evidentiary support for the conclusion that the features recited in the claims were known at the time of the present invention. Accordingly, the Appellants request that such evidentiary support be placed on the record, or the obviousness rejections withdrawn.

Independent claims 1, 12, and 16 recite “one or more of the first high-frequency module and the second high-frequency module includes a local oscillator, and wherein **the one or more high-frequency module including the local oscillator is provided in a housing that is separate from a housing of the measuring-device unit.**” The Appellants submit that the applied art, either when taken singularly or in combination, fail to disclose or suggest all of the above limitations.

While the Office Action dated August 13, 2009, acknowledges that the combination of *Weiler et al.* and *Seike et al.* does not disclose the above quoted limitations from independent claims 1, 12, and 16, for the sake of thoroughness, the Appellants will now provide a discussion in support of such a conclusion.

In the Office Action dated August 13, 2009, the portable computer (15) of *Weiler et al.* is cited as the device under test, the monitoring unit (5) as the measuring-device unit, and receiver units (3a-3n) as the at least one high-frequency module. *Weiler et al.* is cited for the teaching of the features of claim 1 except that the Office Action notes that *Weiler et al.* fails to explicitly a state diagram of an I-Q level in the measuring device. For such features, the Office Action cites *Seike et al.*

*Seike et al.* describe a radio communication analyzer that can test a radio device under test. As can be seen in FIG. 1B of *Seike et al.*, this reference does not contemplate a housing for a

high-frequency module that is separate from a housing of a measuring-device unit. In *Seike et al.*, a single housing is depicted, and no such separate housing is contemplated or even suggested, with the only possible exception being for a data storage unit, and clearly not for a high-frequency module including a local oscillator. While the embodiment of FIG. 13 describes a local oscillator, such local oscillator is not included as part of a high-frequency module that is provided in a housing that is separate from a housing of a measuring-device unit. Rather, the local oscillator is described as being part of the radio communication analyzer, which is clearly shown as being in a single housing in FIG. 1B.

Thus, *Weiler et al.* never mentions such an oscillator, and *Seike et al.* does not disclose or suggest a high-frequency module including an oscillator that is provided in a housing that is separate from a housing of a measuring-device unit, in the manner recited in independent claims 1, 12, and 16.

Furthermore, *Weiler et al.* does not provide any reason for providing such a local oscillator in a housing separate from a housing of a measuring-device unit, as appears to be suggested by the comments set forth in the Advisory Action dated September 28, 2009. The monitoring unit (5) in *Weiler et al.* is being cited for the measuring-device unit, and receiver units (3a-3n) as the at least one high-frequency module. However, the receiver units (3a-3n) do not perform any signal processing, for example by an oscillator, but rather are merely used to receive the signal, and merely perform a threshold and frequency range scanning, and then transmits the signal to the monitoring unit (5). Accordingly, such a teaching would not have lead one of ordinary skill in the art to modify the teaching in *Seike et al.* to include a local oscillator anywhere but in the radio communication analyzer housing, absent hindsight considerations. (The Appellants also note that the comments set forth in the Advisory Action also appear to rely upon

the teaching in *Wedge et al.* to arrive at the conclusion that a local oscillator in a housing separate from a housing of a measuring-device unit; however, as will be discussed below, the Appellants respectfully disagree with such an analysis and conclusion.)

Thus, the Office Action dated August 13, 2009, acknowledges that the combination of *Weiler et al.* and *Seike et al.* does not disclose one or more high frequency modules that include a local oscillator, and where the high-frequency module including the local oscillator is provided in a housing that is separate from a housing of a measuring-device unit. However, the Office Action cites *Wedge et al.* for the teaching of such features, for example, with reference to the local oscillator (58) shown in FIG. 3 of *Wedge et al.*

With regard to the teaching of a high frequency module including a local oscillator provided in a housing separate from a housing of a measuring-device unit, the Office Action indicates that “Wedge disclose a system which include a transceiver that share a local oscillator (fig.3, item 58) since Weiler discloses a high frequency module including a transceiver in (fig.5, item 19, 20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a transceiver that includes a local oscillator as in Wedge’s invention in order to generate high frequency signal.” (Page 3, lines 17-22.) The Appellants further note that the Advisory Action states that “[t]he measuring unit in this case is (fig. 3, item 18) which is separate from the local oscillator.” (Page 2, last line.) Thus, it appears that the rejection is being based on a teaching in *Wedge et al.* of a local oscillator (58) that is presumed in the Office Action to be separately housed from the other components of the device, namely, power meter (18). The Appellants respectfully traverse the conclusions reached in the Office Action.

The Appellants submit that nowhere in *Wedge et al.* is it disclosed that the power meter (18) is separated from any high-frequency modules. In fact, the term “housing” (or even a similar term) is not present in *Wedge et al.*

The Appellants submit that, based on the descriptions and depictions in *Wedge et al.*, it must be concluded that the power meter (18) is provided within the same housing as the remainder of the apparatus. For example, the Office Action appears to be asserting that the block diagram of components shown in FIG. 3 provides a teaching of separate housings; however, the Appellants note that FIG. 2 of *Wedge et al.* in fact depicts the entire apparatus (10) as a single unit, and thus clearly contradicts such a conclusion. In FIG. 2, the apparatus (10) is clearly depicted as a monolithic, single unit. Additionally, column 4, lines 39-42, of *Wedge et al.* states that “the apparatus 10 of the present invention **includes** a six-port passive correlation network 12 which is operatively connected to a noise source 14, a noise source 16 and a power meter 18.” (Emphasis added.) Thus, the power meter (18) is not separated from the other components in a separate housing. And the local oscillator (58) is in the same apparatus as the power meter (18). For example, column 5, line 67, through column 6, line 5, states that “For the embodiment of the apparatus 10 shown in FIG. 1, a microwave mixer 52 and an associated **local oscillator** 53 are connected to the component 50 to convert the noise power from the various network output ports 34-40 down to intermediate frequencies which can be detected by the power meter 18.” Thus, the Appellants submit that *Wedge et al.* does not disclose one or more high frequency modules that include a local oscillator, and where the high-frequency module including the local oscillator is provided in a housing that is separate from a housing of a measuring-device unit, as recited in claims 1, 12, and 16.

Furthermore, the Appellants submit that the attempted comparison/combination of a transceiver and local oscillator in *Wedge et al.* with a transceiver in a high frequency module in *Weiler et al.* set forth in the Office Action is unclear, incorrect, and based on the improper use of hindsight. As noted above, the Office Action states that “Wedge disclose a system which include a transceiver that share a local oscillator (fig.3, item 58) since Weiler discloses a high frequency module including a transceiver in (fig.5, item 19, 20).” However, *Wedge et al.* does not disclose a transceiver. *Wedge et al.*, in fact, never uses the term “transceiver.” As depicted in FIG. 3, the elements (64) and (66) are directional couplers, which are only able to **receive** signals from the DUT, but are not able to send signals to the DUT, and thus are not analogous to a transceiver as suggested in the Office Action. Note that column 5, lines 46–48, states “[c]onsequently, the directional coupler 46 **receives** an input from the input terminal 22 of DUT 20 and an input from the directional coupler 42.” (Emphasis added. See also, FIG. 1.) The apparatus (10) is not able to send something to the DUT, besides noise. Note the noise sources (14) and (16) in FIG. 3. But, this noise includes no user or control data, and is not a bidirectional communication. Furthermore, it is impossible to test a DUT like in the invention with the apparatus of *Weiler et al.* in combination with the apparatus of *Wedge et al.*, since *Weiler et al.* describes only a receiving unit with respect to the DUT, and the transmitter described therein communicates with the monitoring unit (5) and not with the DUT. Thus, in both *Weiler et al.* and *Wedge et al.*, the communication with the DUTs is taking place only in one direction.

Thus, the Appellants respectfully submit that the cited references, either when taken singularly or in combination, fail to disclose or suggest all of the features recited in independent claims 1, 12, and 16.

In addition to the above noted arguments in support of the patentability of independent claims 1, 12, and 16 over the applied references, the Appellants respectfully traverse an additional assertion set forth in the Office Action. More specifically, the Office Action (see page 2, last three lines) and the Advisory Action (see page 2, lines 3-4) both state that Weiler discloses “a first high-frequency module (fig.4, item 3A) including a transmitter device (col.6, lines 28-31) configured to communicate with the device under test (fig.4, item 5)....” The Appellants submit that receiver unit (3a) of *Weiler et al.* does not include a transmitter device that is configured to communicate with portable computer (15).

In the Office Action, the portable computer (15) of *Weiler et al.* is cited as the device under test, the monitoring unit (5) as the measuring-device unit, and receiver units (3a-3n) as the at least one high-frequency module. With respect to the limitations reciting a first high-frequency module comprising a transmitter device configured to communicate with the device under test, the Office Action indicates that *Weiler et al.* teaches such features in column 6, lines 28-31. However, the cited discussion in column 6 relates to communications between the receiver units (3a to 3n) and the monitoring unit (5), and does not disclose any transmission from the receiver units to the portable computer (15), which is cited for the device under test.

Independent claims 1, 12, and 16 recite **a first high-frequency module including a transmitter device configured to communicate with the device under test** and that is configured to subsequently forward a bitstream to the device under test. The apparatus and method described in *Weiler et al.* never discloses forwarding a bitstream from the receiver units (3a-3n), or any other device, to the personal computer (15). The personal computer (15) is merely being monitored for high frequency interference signals in a unidirectional manner. In fact, the apparatus and method described in *Weiler et al.* do not include any structure capable of

forwarding a bitstream to the personal computer, nor does the reference disclose a reason for doing so.

*Weiler et al.* describes an apparatus for detecting high frequency interference radiation signals, such as radio frequency emissions, onboard a passenger aircraft that includes at least two receiver units for receiving and measuring the interference radiation signal, and a monitoring unit for evaluating the signal measurement results. The apparatus detects the undesired radiation of a switched on notebook (i.e., the device under test) which is plugged into the power supply of the aircraft cabin using HF-receiver modules. But there is not communication from the HF-receiver modules to the notebook. The HF receiver modules do not transmit anything to the device under test. Also, the HF-receiver modules are detecting only the electromagnetic radiation of the device under test, and not any information, for example a bitstream, coded in it.

Thus, for this additional reason, the Appellants submit that the rejection of independent claims 1, 12, and 16 is improper.

Accordingly, the Examiner has not established a *prima facie* case of obviousness with respect to independent claims 1, 12, and 16. Appellants do not separately argue the patentability of dependent claims 5-7, 10, 11, 14, 15, and 17-19, but rather, the patentability of these claims stands or falls with their respective independent claim. The Honorable Board is respectfully requested to reverse the rejection of claims 1, 5-7, 10-12, and 14-19 under 35 U.S.C. § 103.

**B. THE REJECTION OF CLAIMS 3, 4, 8, AND 9 UNDER 35 U.S.C. §103 FOR OBVIOUSNESS PREDICATED UPON *WEILER ET AL.* IN VIEW OF *SEIKE ET AL.*, *WEDGE ET AL.*, AND *AGILENT PNA NETWORK ANALYZERS***

Appellants do not separately argue the patentability of dependent claims 3, 4, 8, and 9. Rather, the patentability of claims 3, 4, 8, and 9 stands or falls with independent claim 1.

**VIII. CONCLUSION AND PRAYER FOR RELIEF**

For the foregoing reasons, Appellants request the Honorable Board to reverse each of the Examiner's rejections.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

DITTHAVONG MORI & STEINER, P.C.

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**IX. CLAIMS APPENDIX**

1. A high-frequency measuring system for measuring a device under test, comprising:  
a measuring-device unit; and

a first high-frequency module including a transmitter device configured to communicate with the device under test and a second high-frequency module including a receiver device configured to communicate with the device under test, wherein each high-frequency module is placed spatially separated from the measuring-device unit and each high-frequency module is connected to the measuring-device unit via a digital interface,

wherein the measuring-device unit is configured to process input data input into the measuring-device unit to form a bitstream for transmission via the digital interface to the first high-frequency module, and the first high-frequency module is configured to subsequently forward the bitstream to the device under test using the transmitter device, the processing of the input data including assigning symbols to states in a state diagram of an I-Q (in phase – quadrature phase) level in the measuring-device unit,

wherein one or more of the first high-frequency module and the second high-frequency module includes a local oscillator, and wherein the one or more high-frequency module including the local oscillator is provided in a housing that is separate from a housing of the measuring-device unit.

2. (Canceled)

3. A high-frequency measuring system according to claim 1, wherein the digital interface is a serial interface.

4. A high-frequency measuring system according to claim 1, wherein the digital interface is a parallel interface.

5. A high-frequency measuring system according to claim 1, wherein the digital interface is an optical interface.

6. A high-frequency measuring system according to claim 1, wherein the digital interface is an electrical interface.

7. A high-frequency measuring system according to claim 1, wherein at least one of the first and second high-frequency modules is supplied with electrical energy via a power-supply unit independent from the measuring-device unit.

8. A high-frequency measuring system according to claim 1, wherein a plurality of identical ports are provided on the measuring-device unit for the digital interface.

9. A high-frequency measuring system according to claim 1, wherein a plurality of different ports are provided on the measuring-device unit for the digital interface.

10. A high-frequency measuring system according to claim 1, wherein control data or user data is transmitted in a standardized form via the digital interface, and wherein the first high-frequency module comprises means for processing a high-frequency signal with regard to the transmission of data in standardized form via the digital interface or for processing the data

transmitted in standardized form with regard to at least one predetermined transmission standard for the high-frequency signal.

11. A high-frequency measuring system according to claim 1, wherein the input data is manually input by any one of operating keys, a rotary knob, or arrow keys.

12. A high-frequency measuring system for measuring a device under test, comprising:  
a measuring-device unit for receiving input data from a user; and  
a first high-frequency module including a transmitter device configured to communicate with the device under test and a second high-frequency module including a receiver device configured to communicate with the device under test, wherein each high-frequency module is placed spatially separated from the measuring-device unit and each high-frequency module is connected to the measuring-device unit via a digital interface,

wherein the receiver device is configured to receive a message comprising a high-frequency signal originating from the device under test, the second high-frequency module being configured to process the high-frequency signal to form a first bitstream for transmission via the digital interface to the measuring-device unit, the processing, by the second high-frequency module, including converting the high-frequency signal to an intermediate-frequency signal and digitizing the intermediate-frequency signal for transmission via the digital interface to the measuring-device unit for evaluation of the message,

wherein the measuring-device unit is configured to process the input data to form a second bitstream for transmission via the digital interface to the first high-frequency module, and

the first high-frequency module is configured to subsequently forward the second bitstream to the device under test using the transmitter device,

wherein one or more of the first high-frequency module and the second high-frequency module includes a local oscillator, and wherein the one or more high-frequency module including the local oscillator is provided in a housing that is separate from a housing of the measuring-device unit.

13. (Canceled)

14. A high-frequency measuring system according to claim 12, wherein the conversion of the high-frequency signal to an intermediate-frequency signal includes receiving the high-frequency signal at the receiver device and subsequently mixing the high-frequency signal with a signal generated by the local oscillator, which is included as part of the second high-frequency module .

15. A high-frequency measuring system according to claim 14, wherein the intermediate-frequency signal is subdivided into an in-phase branch and a quadrature-phase branch and mixed in the in-phase branch with a signal generated by a second local oscillator.

16. A method for testing a device under test, comprising:  
receiving input data from a user using a measuring-device unit;  
forming, based on the input data, a first bitstream for transmission via a digital interface to a first high-frequency module, the first high-frequency module including a transmitter configured

to communicate with the device under test to subsequently forward the first bitstream to the device under test, wherein the first bitstream forming includes assigning symbols to states relating to an I-Q (in phase – quadrature phase) level; and

receiving a second bitstream representative of high-frequency signal messages originating from the device under test via a second high-frequency module including a receiver configured to communicate with the device under test, the second high-frequency module processing the high-frequency signal messages to form the second bitstream, the processing, by the second high-frequency module, including converting the high-frequency signal messages to intermediate-frequency signals and digitizing the intermediate-frequency signals,

wherein one or more of the first high-frequency module and the second high-frequency module includes a local oscillator, and wherein the one or more high-frequency module including the local oscillator is provided in a housing that is separate from a housing of the measuring-device unit.

17. A method according to claim 16, further comprising:

determining a specific bit sequence to be transmitted to the device under test.

18. A method according to claim 17, further comprising:

generating one or more control signals in the bit sequence to control the first high-frequency module.

19. A method according to claim 16, wherein the input data is input by the user using any one of operating keys, a rotary knob, or arrow keys.

20. (Canceled)

**X. EVIDENCE APPENDIX**

Appellants are unaware of any evidence that is required to be submitted in the present Evidence Appendix.

**XI. RELATED PROCEEDINGS APPENDIX**

Appellants are unaware of any related proceedings that are required to be submitted in the present Related Proceedings Appendix.